OUTLOOK SUBMISSION

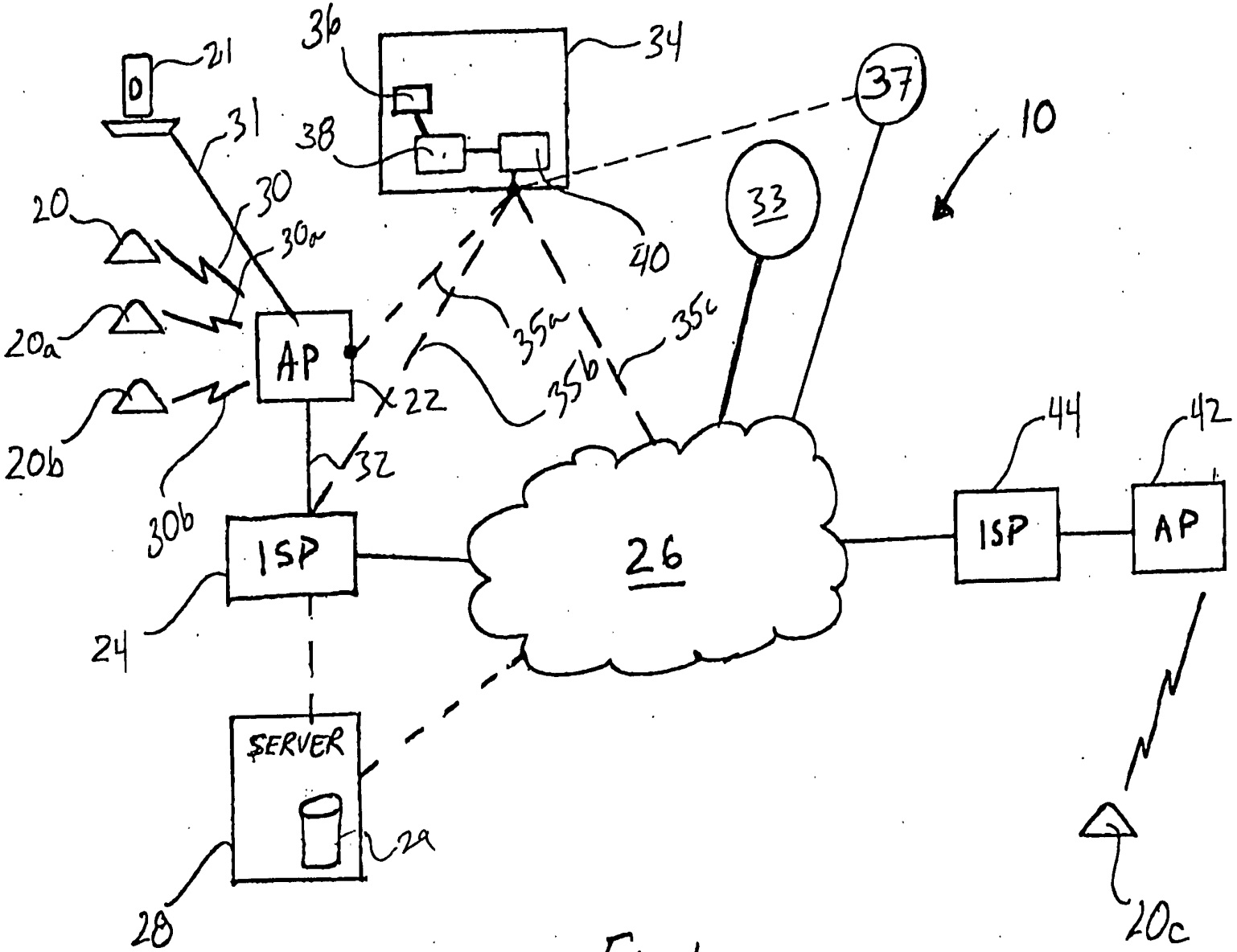


Fig. 1

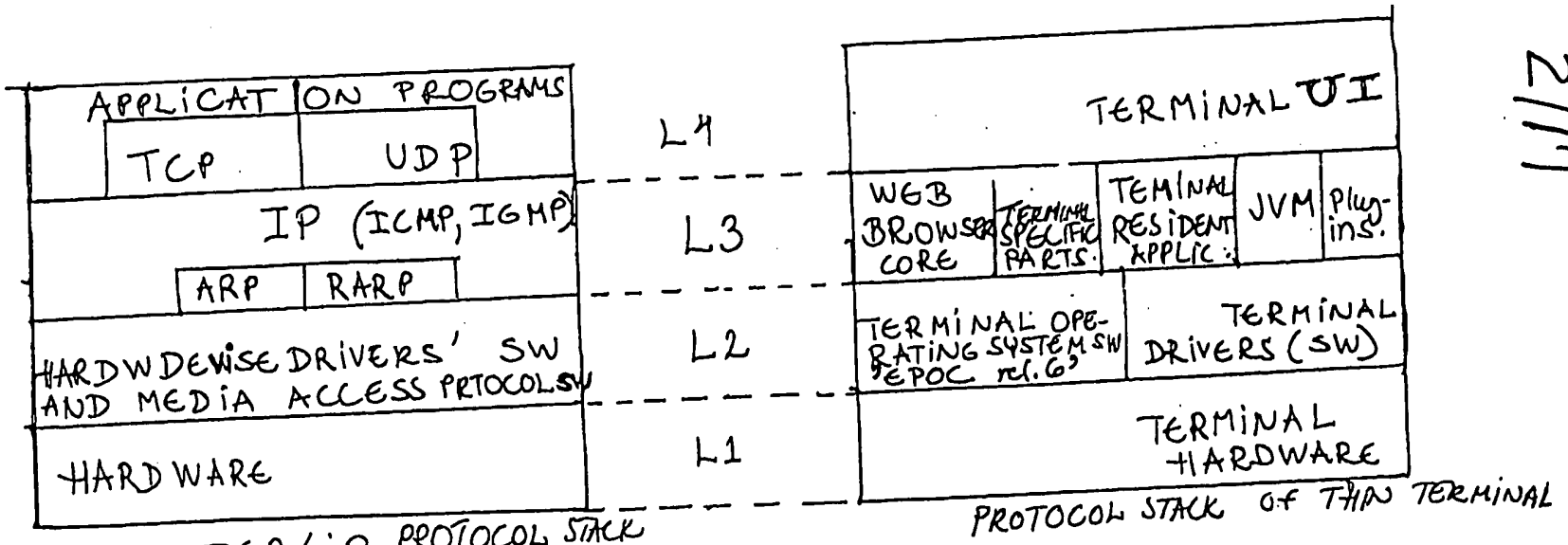

APPLICATION PROGRAMS
TCP
UDP
IP (ICMP, IGMP)
ARP
RARP
HARDWARE DEVICE DRIVERS' SW AND MEDIA ACCESS PROTOCOL SW
HARDWARE
L4
L3
L2
L1
TCP/IP PROTOCOL STACK of SERVER
TERMINAL UI
WEB BROWSER CORE
TERMINAL SPECIFIC PARTS
TERMINAL RESIDENT APPLIC.
JVM
Plug-ins
TERMINAL OPERATING SYSTEM SW EPOC rel. 6
TERMINAL DRIVERS (SW)
TERMINAL HARDWARE
PROTOCOL STACK OF THIN TERMINAL

Figure 1 b.

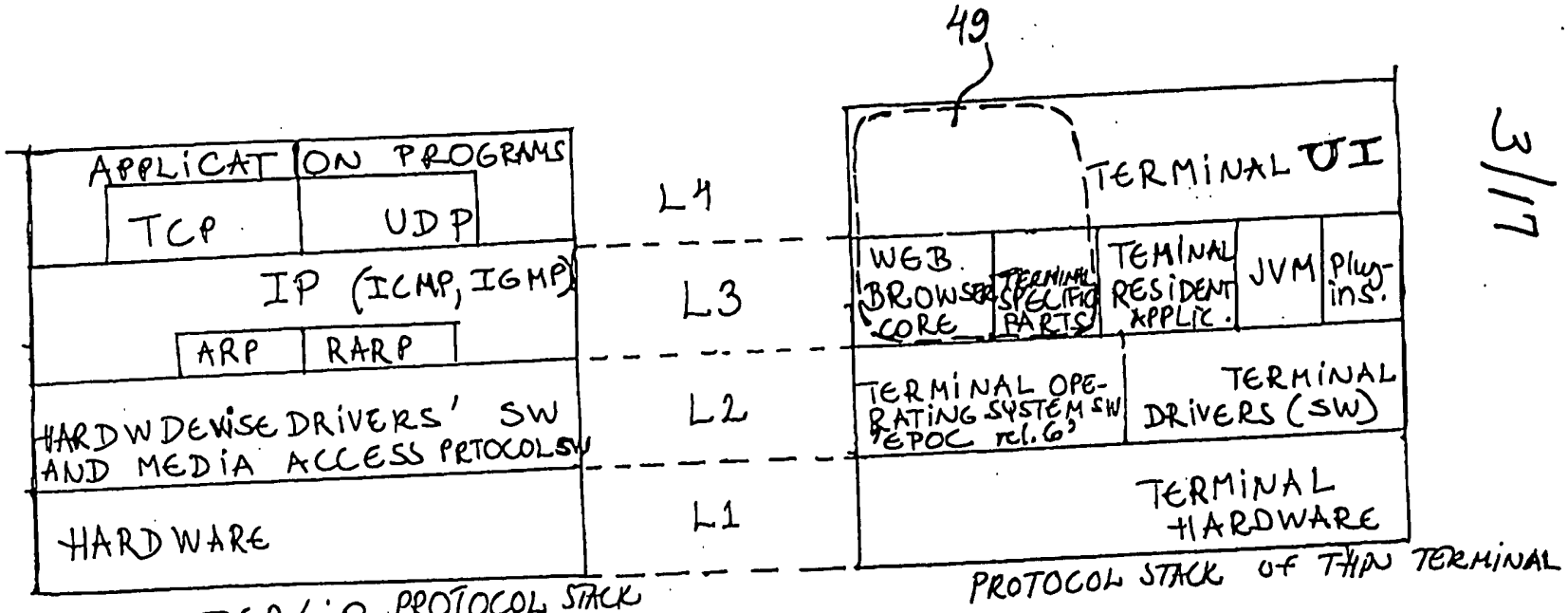

49
APPLICATION PROGRAMS
TCP
UDP
IP (ICMP, IGMP)
ARP
RARP
HARDWARE DRIVERS' SW AND MEDIA ACCESS PROTOCOL SW
HARDWARE
L4
L3
L2
L1
TCP/IP PROTOCOL STACK of SERVER
TERMINAL UI
WEB BROWSER CORE
TERMINAL SPECIFIC PARTS
TERMINAL RESIDENT APPLIC.
JVM
Plug-ins
TERMINAL OPERATING SYSTEM SW EPOC rel. 6
TERMINAL DRIVERS (SW)
TERMINAL HARDWARE
PROTOCOL STACK of THIN TERMINAL

Figure 1c

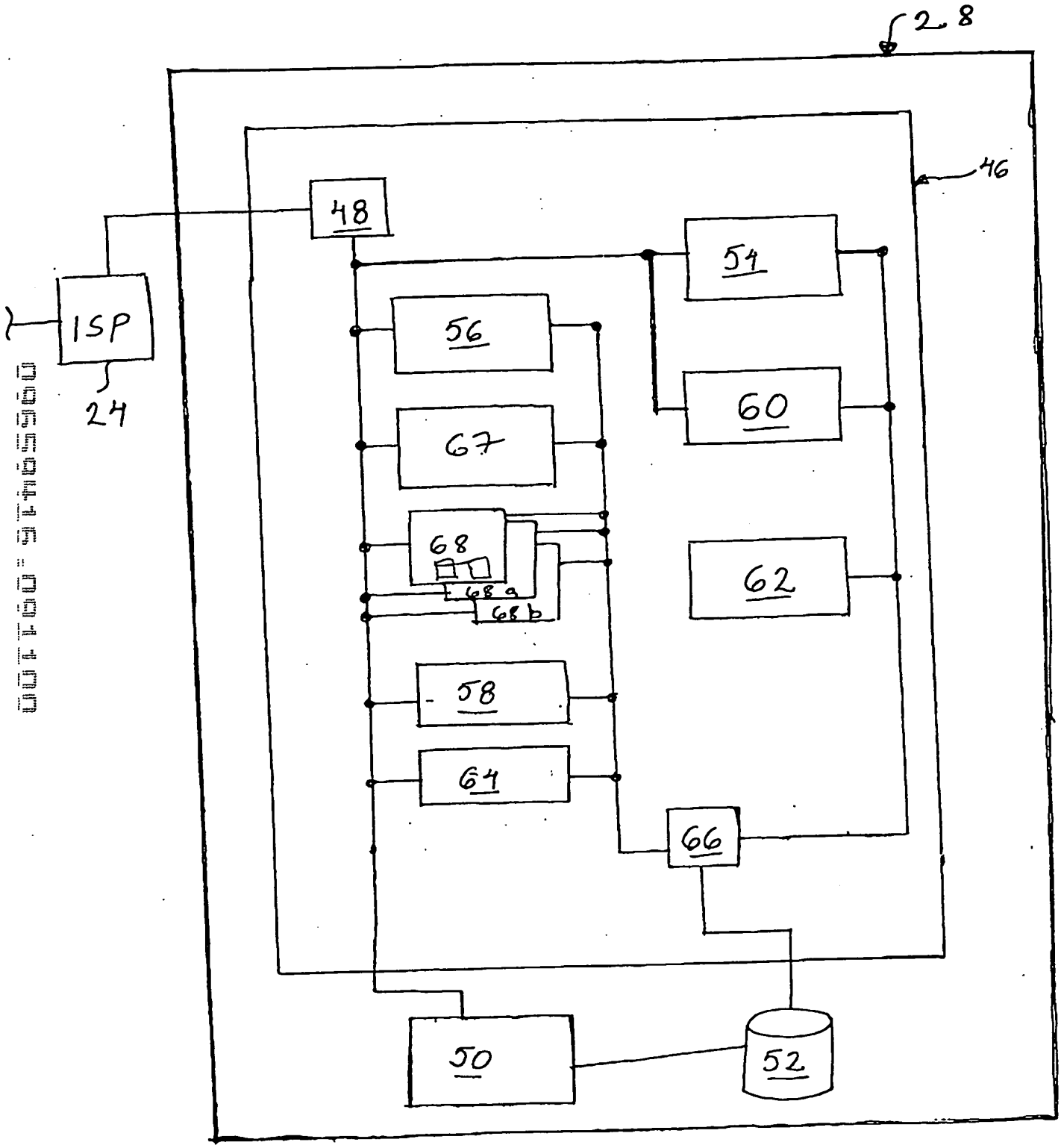


Fig. 2

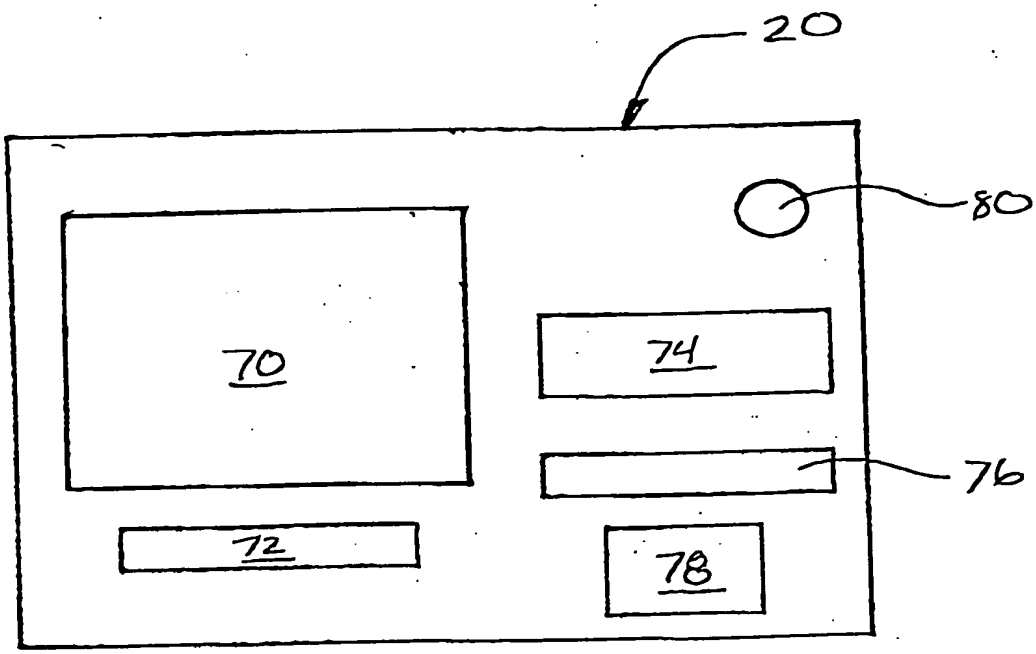


Fig. 3

Figure 4.

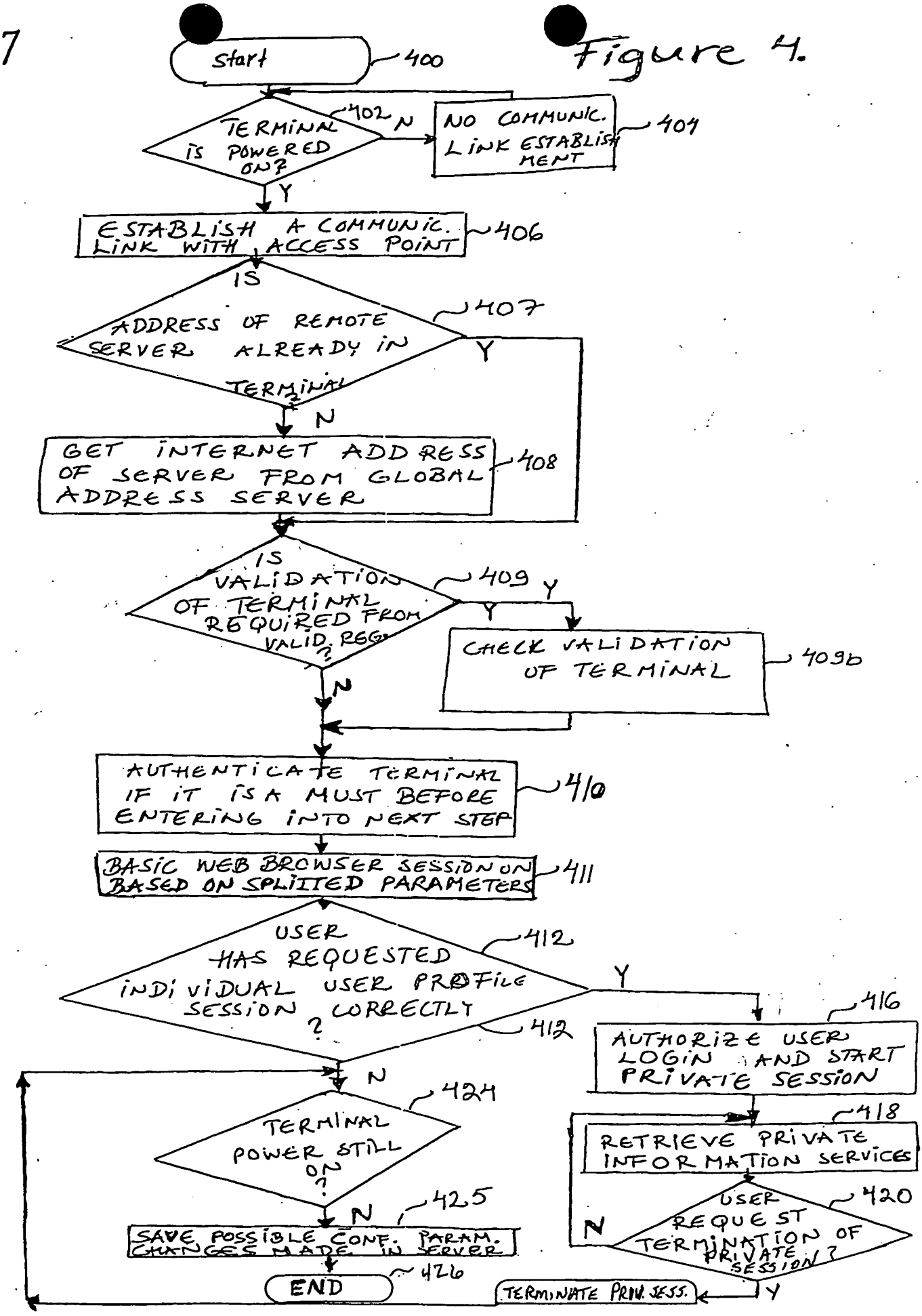

start
400
TERMINAL IS POWERED ON?
402
N
NO COMMUNIC. LINK ESTABLISH MENT
404
Y
ESTABLISH A COMMUNIC. LINK WITH ACCESS POINT
406
IS ADDRESS OF REMOTE SERVER ALREADY IN TERMINAL?
407
Y
N
GET INTERNET ADDRESS OF SERVER FROM GLOBAL ADDRESS SERVER
408
IS VALIDATION OF TERMINAL REQUIRED FROM VALID. REQ.?
409
Y
CHECK VALIDATION OF TERMINAL
409b
N
AUTHENTICATE TERMINAL IF IT IS A MUST BEFORE ENTERING INTO NEXT STEP
410
BASIC WEB BROWSER SESSION ON BASED ON SPLITTED PARAMETERS
411
USER HAS REQUESTED INDIVIDUAL USER PROFILE SESSION CORRECTLY?
412
412
Y
AUTHORIZE USER LOGIN AND START PRIVATE SESSION
416
RETRIEVE PRIVATE INFORMATION SERVICES
418
USER REQUEST TERMINATION OF PRIVATE SESSION?
420
N
Y
TERMINATE PRIV. SESS.
N
TERMINAL POWER STILL ON?
424
N
SAVE POSSIBLE CONF. PARAM. CHANGES MADE IN SERVER
425
END
426

Figure 4.b)

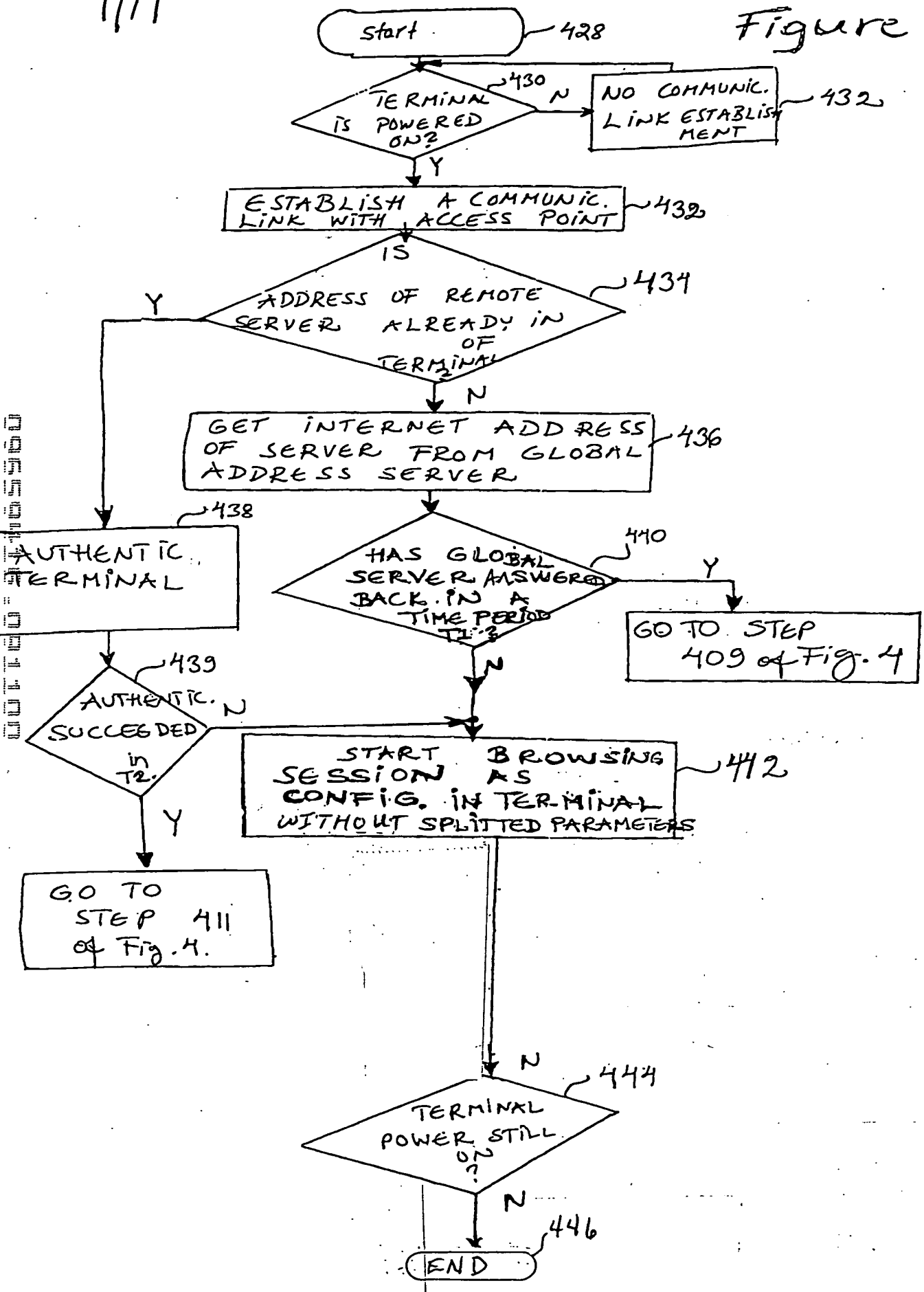
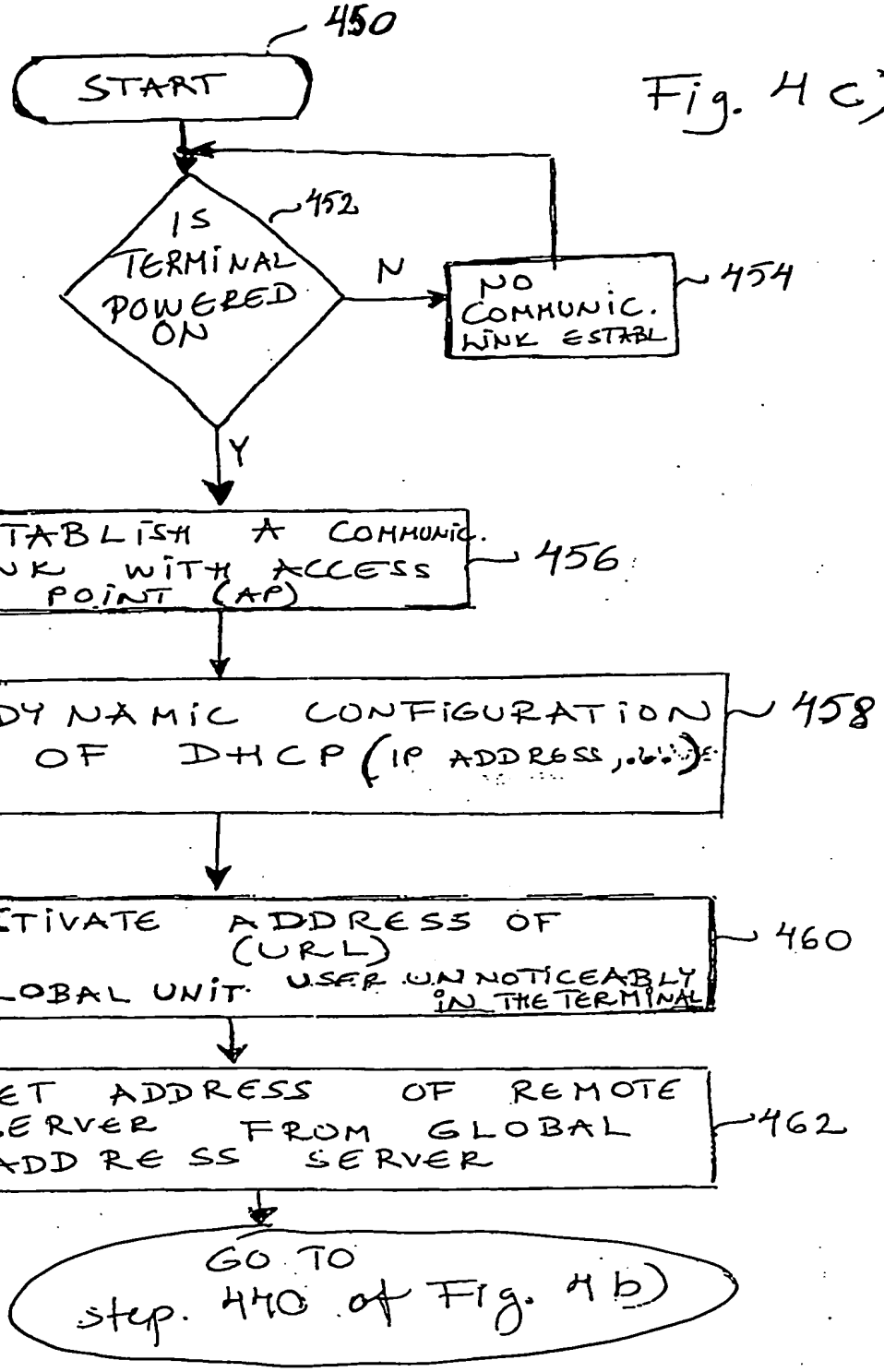

start
428
TERMINAL IS POWERED ON?
430
N
NO COMMUNIC. LINK ESTABLISHMENT
432
Y
ESTABLISH A COMMUNIC. LINK WITH ACCESS POINT
432
IS ADDRESS OF REMOTE SERVER ALREADY IN OF TERMINAL?
434
Y
N
GET INTERNET ADDRESS OF SERVER FROM GLOBAL ADDRESS SERVER
436
AUTHENTIC. TERMINAL
438
HAS GLOBAL SERVER ANSWERED BACK IN A TIME PERIOD T1?
440
Y
GO TO STEP 409 of Fig. 4
N
AUTHENTIC. SUCCEEDED in T2.
439
N
Y
START BROWSING SESSION AS CONFIG. IN TERMINAL WITHOUT SPLITTED PARAMETERS
442
GO TO STEP 411 of Fig. 4.
N
TERMINAL POWER STILL ON?
444
N
END
446

Fig. 4c)


450
START
452
IS TERMINAL POWERED ON
N
454
NO COMMUNIC. LINK ESTABL
Y
ESTABLISH A COMMUNIC. LINK WITH ACCESS POINT (AP)
456
DYNAMIC CONFIGURATION OF DHCP (IP ADDRESS, ...)
458
ACTIVATE ADDRESS OF GLOBAL UNIT (URL) USER UNNOTICEABLY IN THE TERMINAL
460
GET ADDRESS OF REMOTE SERVER FROM GLOBAL ADDRESS SERVER
462
GO TO step. 440 of Fig. 4b)

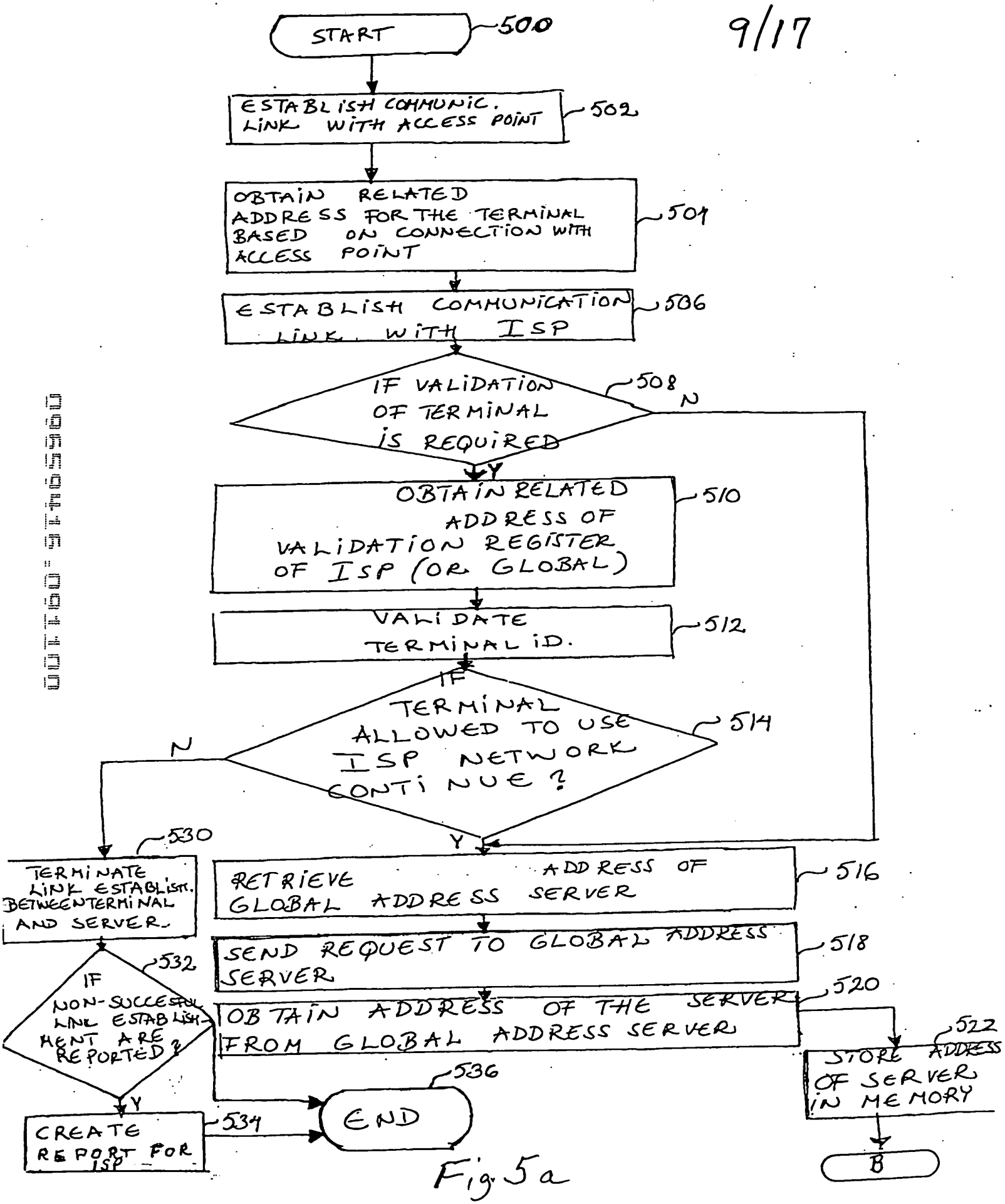

START
500
ESTABLISH COMMUNIC. LINK WITH ACCESS POINT
502
OBTAIN RELATED ADDRESS FOR THE TERMINAL BASED ON CONNECTION WITH ACCESS POINT
504
ESTABLISH COMMUNICATION LINK WITH ISP
506
IF VALIDATION OF TERMINAL IS REQUIRED
508
N
Y
OBTAIN RELATED ADDRESS OF VALIDATION REGISTER OF ISP (OR GLOBAL)
510
VALIDATE TERMINAL ID.
512
IF TERMINAL ALLOWED TO USE ISP NETWORK CONTINUE?
514
N
Y
TERMINATE LINK ESTABLISH. BETWEEN TERMINAL AND SERVER
530
RETRIEVE ADDRESS OF GLOBAL ADDRESS SERVER
516
SEND REQUEST TO GLOBAL ADDRESS SERVER
518
OBTAIN ADDRESS OF THE SERVER FROM GLOBAL ADDRESS SERVER
520
STORE ADDRESS OF SERVER IN MEMORY
522
B
IF NON-SUCCESFUL LINK ESTABLISHMENT ARE REPORTED?
532
Y
CREATE REPORT FOR ISP
534
END
536

Fig. 5a

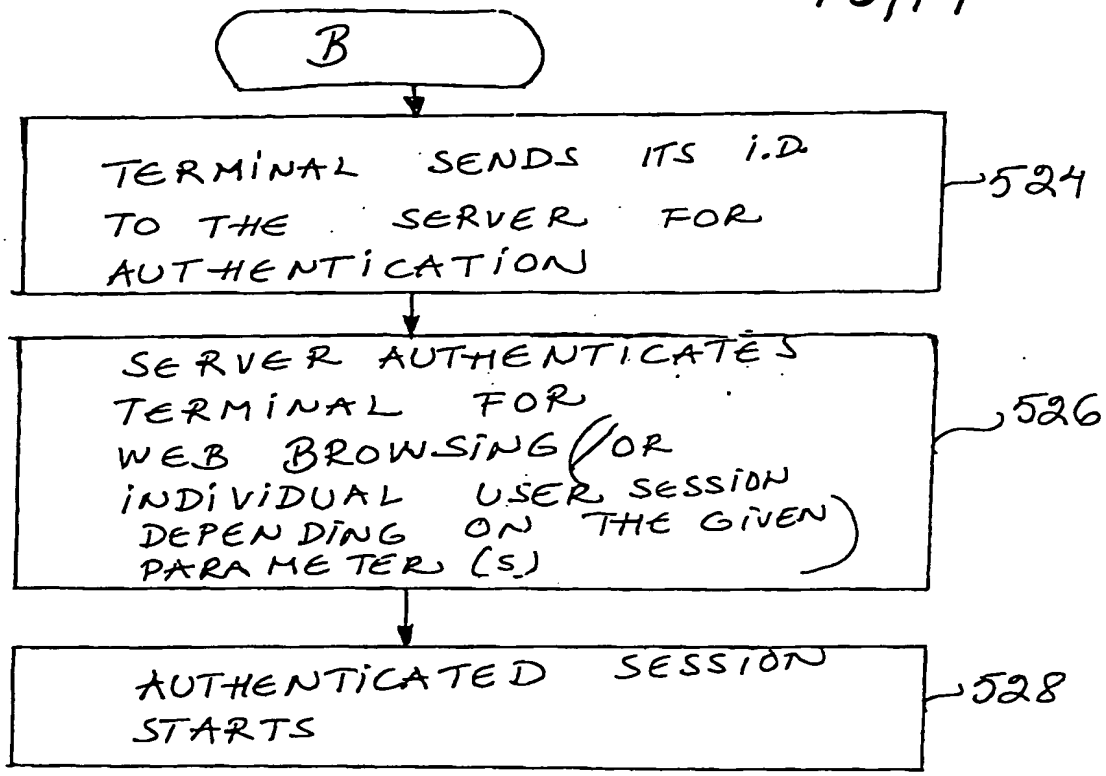

B
TERMINAL SENDS ITS i.D. TO THE SERVER FOR AUTHENTICATION
524
SERVER AUTHENTICATES TERMINAL FOR WEB BROWSING (OR INDIVIDUAL USER SESSION DEPENDING ON THE GIVEN PARAMETER (S))
526
AUTHENTICATED SESSION STARTS
528

Fig. 5 b)

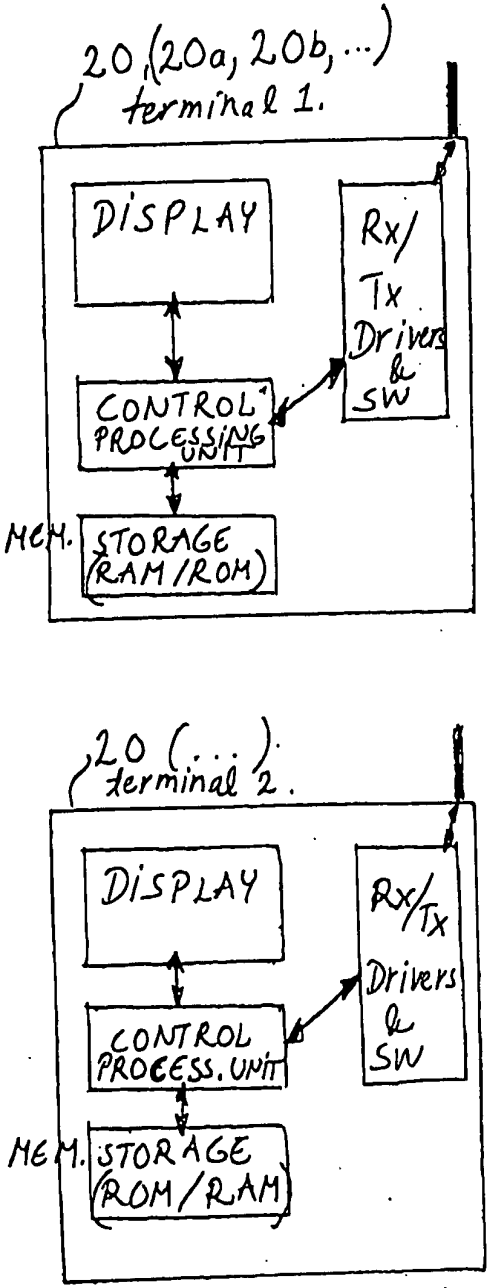

20, (20a, 20b, ...)
terminal 1.
DISPLAY
Rx/
Tx
Drivers
&
SW
CONTROL
PROCESSING
UNIT
MEM.
STORAGE
(RAM/ROM)
20 (...)
terminal 2.
DISPLAY
Rx/Tx
Drivers
&
SW
CONTROL
PROCESS. UNIT
MEM.
STORAGE
(ROM/RAM)

Fig. 6 a)

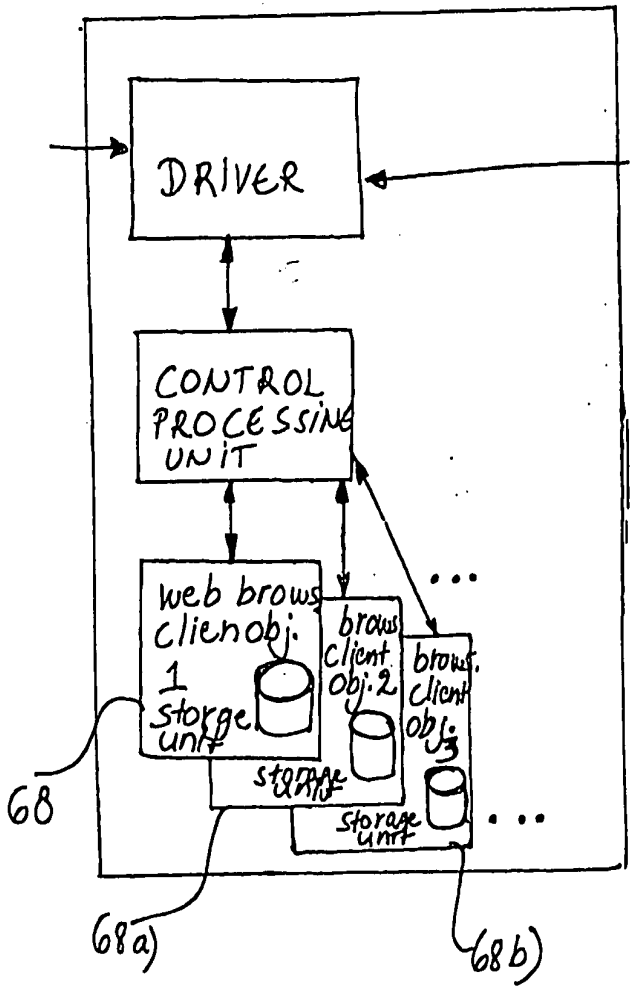

DRIVER
CONTROL
PROCESSING
UNIT
web brows
clien obj.
1
storge
unit
brows
client
obj. 2
brows.
client
obj. 3
storage
unit
storage
unit
...
...
68
68a)
68b)

Fig. 6 b)

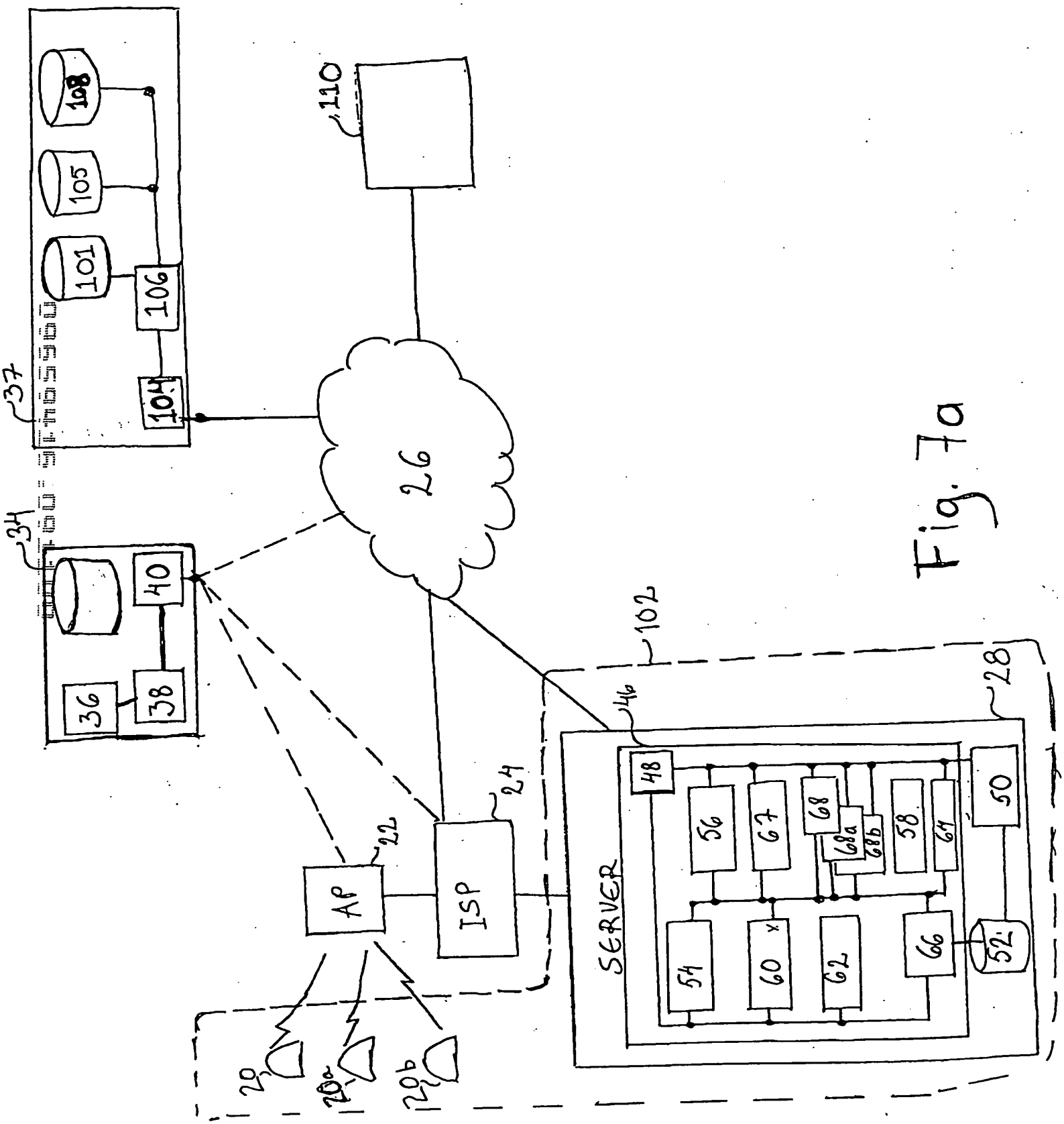

108
105
101
106
104
37
110
26
34
40
36
38
102
28
46
48
56
67
68
68a
68b
58
61
50
SERVER
54
60
62
66
52
ISP
24
AP
22
20
20a
20b

Fig. 7a

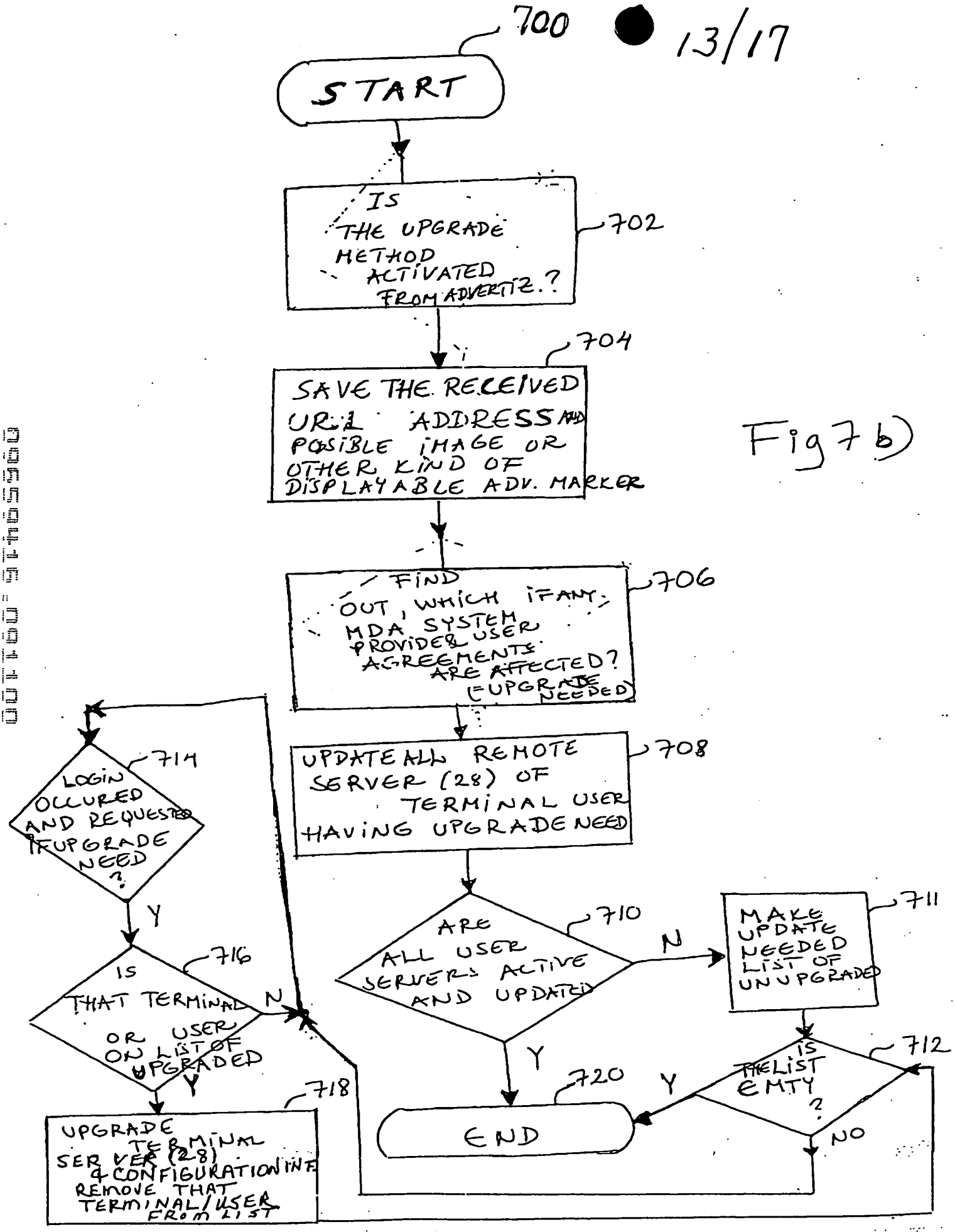

700
START
IS THE UPGRADE METHOD ACTIVATED FROM ADVERTIZ.?
702
704
SAVE THE RECEIVED URL ADDRESS AND POSIBLE IMAGE OR OTHER KIND OF DISPLAYABLE ADV. MARKER
706
FIND OUT, WHICH IF ANY, MDA SYSTEM PROVIDER & USER AGREEMENTS ARE AFFECTED? (=UPGRADE NEEDED)
708
UPDATE ALL REMOTE SERVER (28) OF TERMINAL USER HAVING UPGRADE NEED
710
ARE ALL USER SERVERS ACTIVE AND UPDATED
N
711
MAKE UPDATE NEEDED LIST OF UNUPGRADED
Y
712
IS THE LIST EMTY ?
Y
NO
720
END
714
LOGIN OCCURED AND REQUESTED IF UPGRADE NEED ?
Y
716
IS THAT TERMINAL OR USER ON LIST OF UPGRADED
N
Y
718
UPGRADE TERMINAL SERVER (28) & CONFIGURATION INF. REMOVE THAT TERMINAL/USER FROM LIST

Fig 7b)

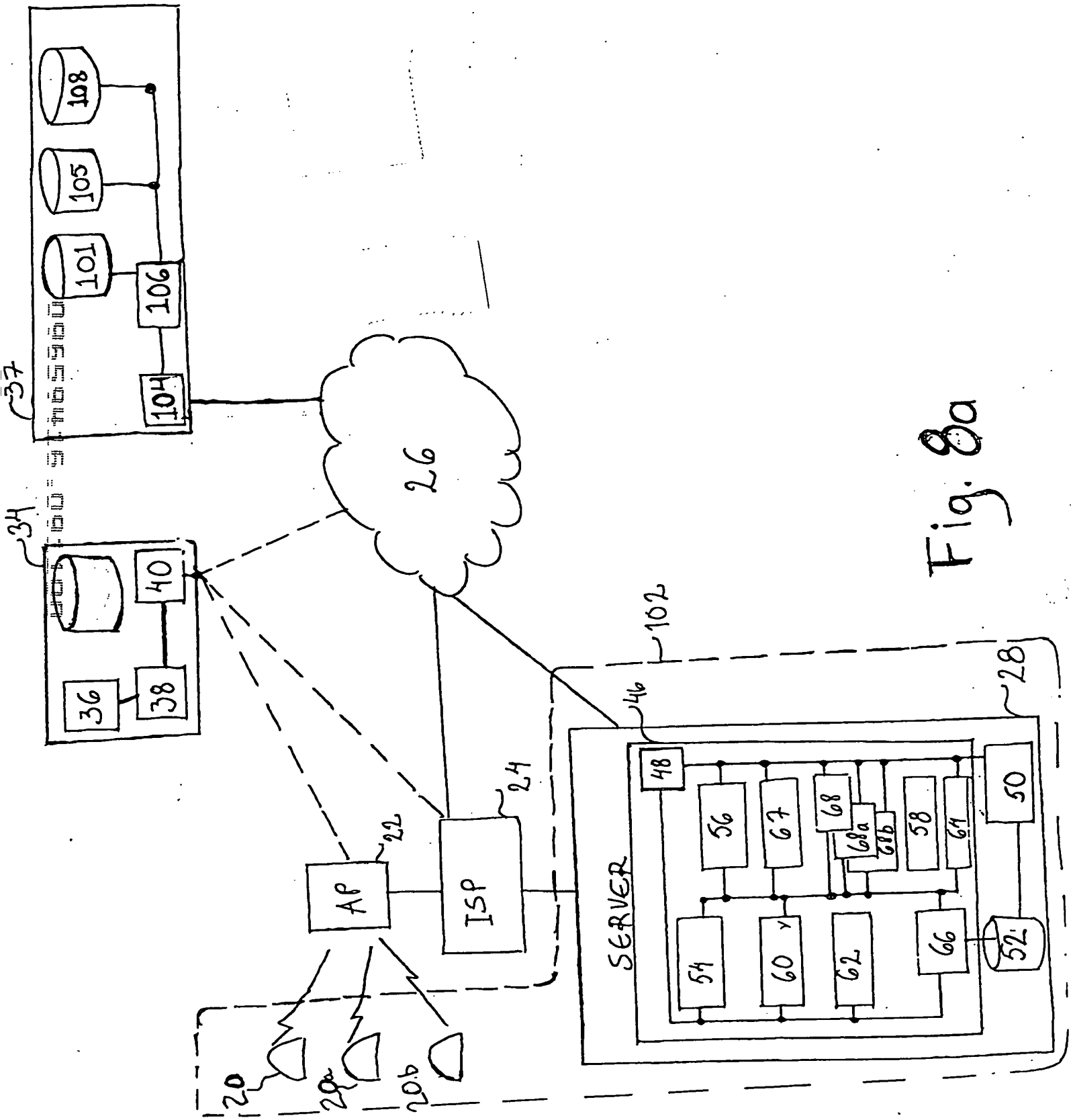

37
108
105
101
106
104
26
34
40
36
38
102
28
46
48
56
67
68
68a
68b
58
61
50
SERVER
54
60
62
66
52
22
AP
24
ISP
20
20a
20b

Fig. 8a

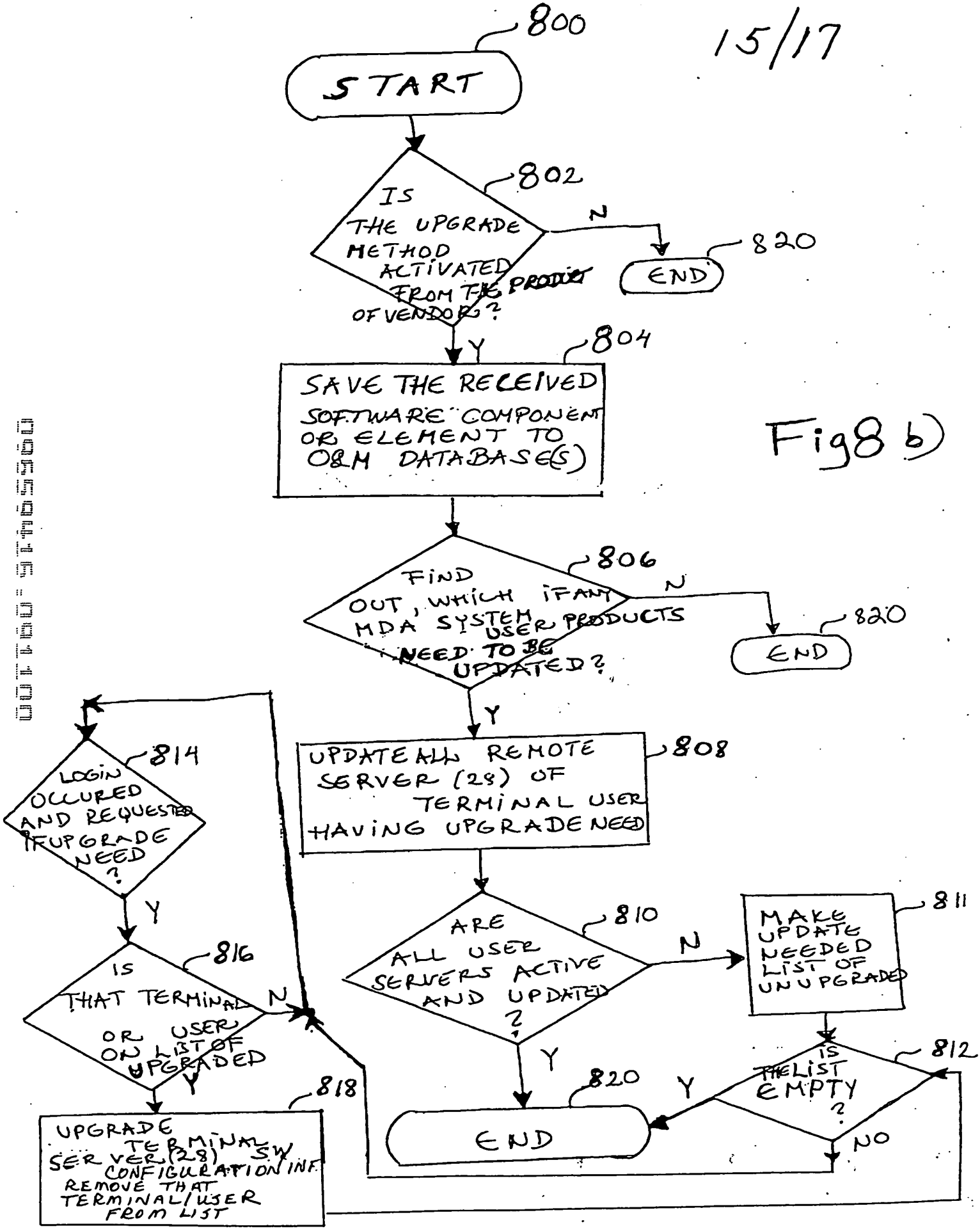

800
START
802
IS THE UPGRADE METHOD ACTIVATED FROM THE PRODUCT OF VENDOR?
N
820
END
Y
804
SAVE THE RECEIVED SOFTWARE COMPONENT OR ELEMENT TO O&M DATABASE(S)
806
FIND OUT, WHICH IF ANY MDA SYSTEM USER PRODUCTS NEED TO BE UPDATED?
N
820
END
Y
808
UPDATE ALL REMOTE SERVER (28) OF TERMINAL USER HAVING UPGRADE NEED
810
ARE ALL USER SERVERS ACTIVE AND UPDATED?
N
811
MAKE UPDATE NEEDED LIST OF UNUPGRADED
Y
820
END
812
IS THE LIST EMPTY?
Y
NO
814
LOGIN OCCURED AND REQUESTED IF UPGRADE NEED?
Y
816
IS THAT TERMINAL OR USER ON LIST OF UPGRADED
N
Y
818
UPGRADE TERMINAL SW SERVER (28) CONFIGURATION INF. REMOVE THAT TERMINAL/USER FROM LIST

Fig8 b)

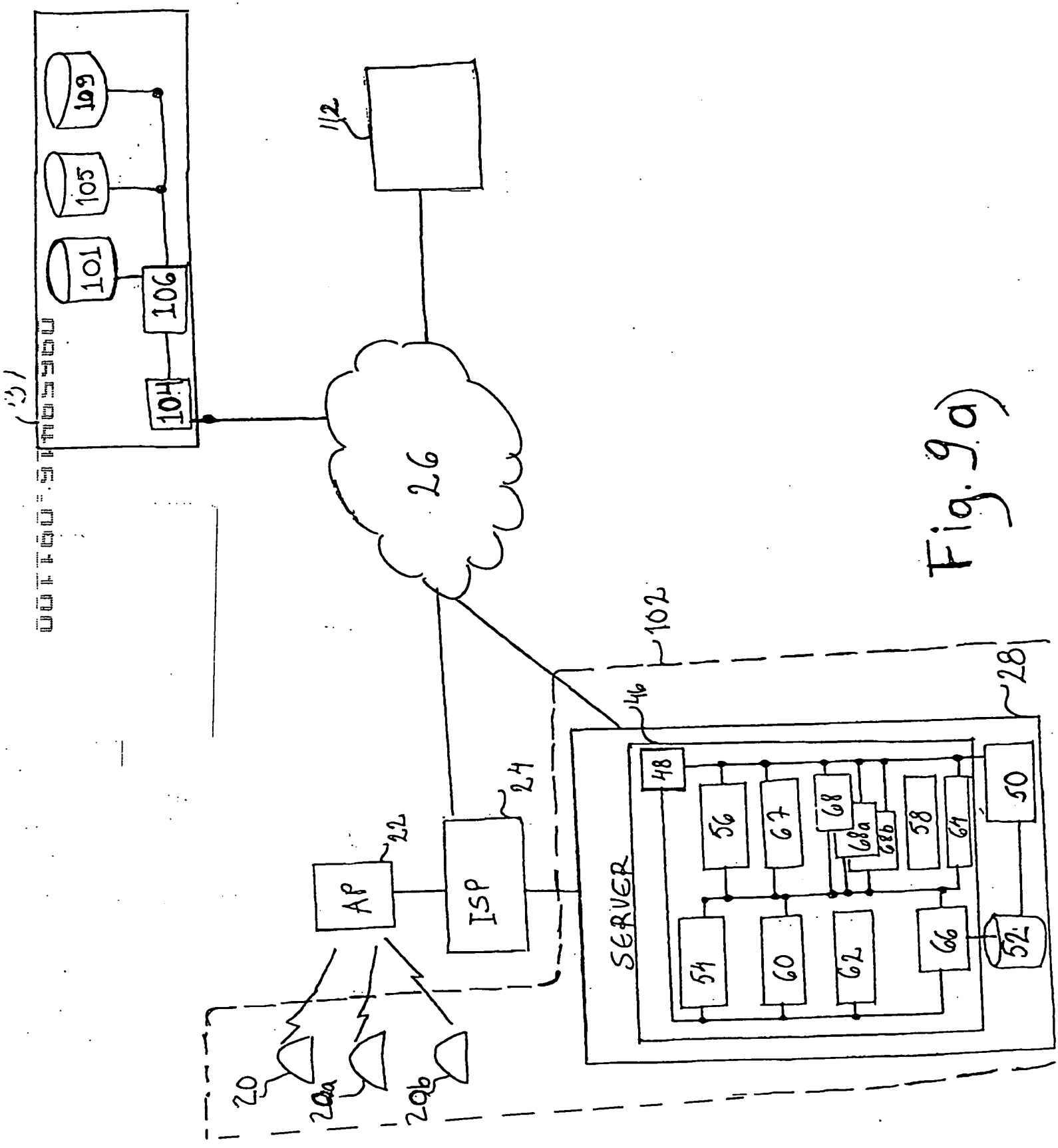

109
105
101
106
104
112
26
102
28
46
48
56
67
68
68a
68b
58
64
50
54
60
62
66
52
SERVER
AP
22
ISP
24
20
20a
20b

Fig. 9a

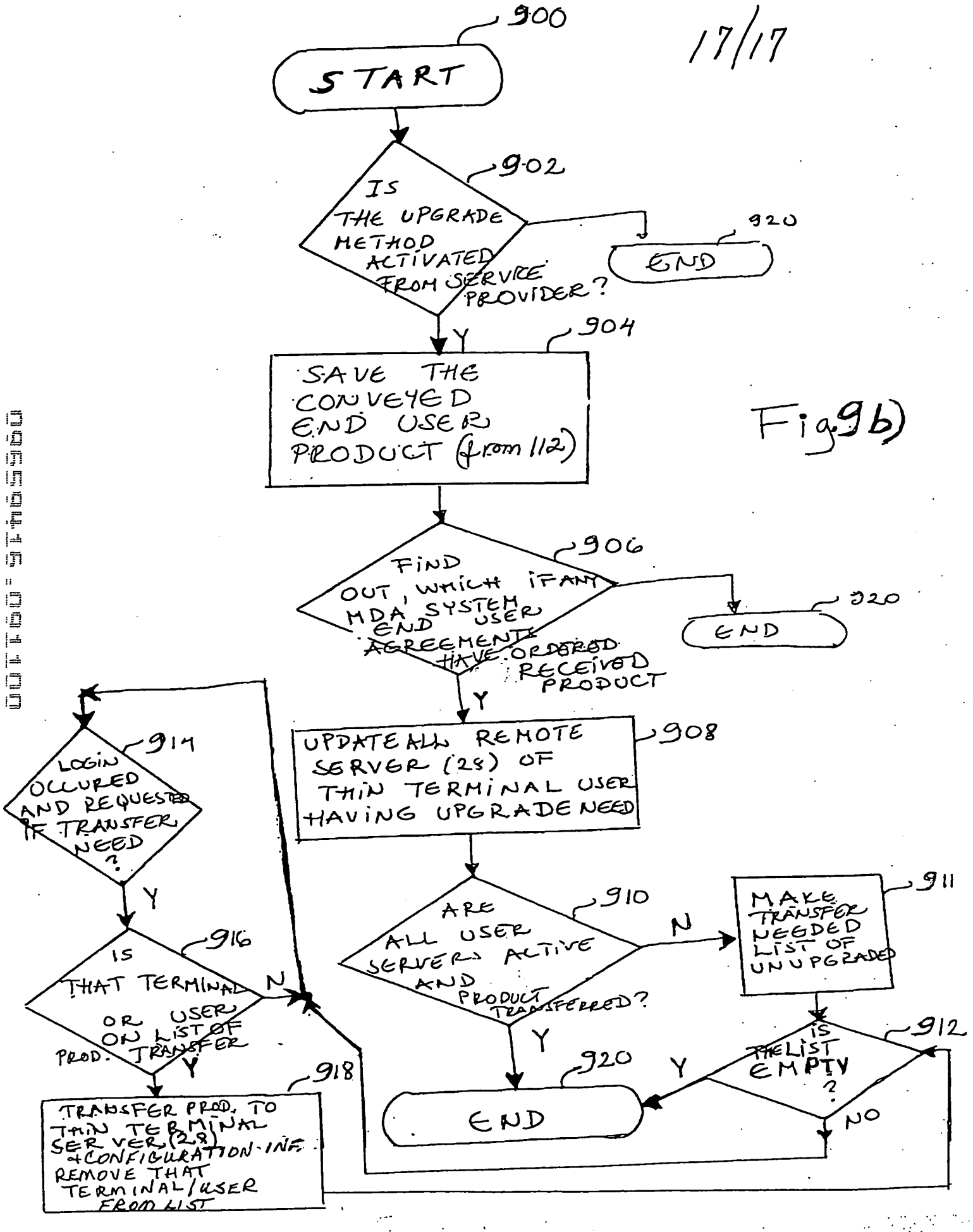

900
START
902
IS THE UPGRADE METHOD ACTIVATED FROM SERVICE PROVIDER?
920
END
Y
904
SAVE THE CONVEYED END USER PRODUCT (from 112)
906
FIND OUT, WHICH IF ANY MDA SYSTEM END USER AGREEMENT HAVE ORDERED RECEIVED PRODUCT
920
END
Y
908
UPDATE ALL REMOTE SERVER (2s) OF THIN TERMINAL USER HAVING UPGRADE NEED
910
ARE ALL USER SERVERS ACTIVE AND PRODUCT TRANSFERRED?
N
911
MAKE TRANSFER NEEDED LIST OF UNUPGRADED
912
IS THE LIST EMPTY ?
Y
NO
Y
920
END
914
LOGIN OCCURED AND REQUESTED IF TRANSFER NEED ?
Y
916
IS THAT TERMINAL OR USER ON LIST OF TRANSFER PROD.
N
Y
918
TRANSFER PROD. TO THIN TERMINAL SERVER (2s) & CONFIGURATION INF. REMOVE THAT TERMINAL/USER FROM LIST

Fig 9b)